

SEMICONDUCTOR POWER MODULE HAVING AN ELECTRICALLY INSULATING HEAT SINK AND METHOD OF MANUFACTURING THE SAME

ABSTRACT OF THE DISCLOSURE

A semiconductor power module includes a lead frame having a first portion at a first level, a second portion surrounding the first portion at a second level, and a plurality of terminals connected to the second portion. The semiconductor power module further includes a power circuit mounted on a first surface of the first portion and an insulator having an electrically insulating property and thermal conductivity. The insulator is adjacent to a second surface of the first portion of the lead frame. The semiconductor power module further includes a sealer having an electrically insulating property that covers the power circuit and the control circuit.